Apply online until **June 15th 2012** www.aiv-paris.org/en/admission/

Depending on their previous experience, students may apply to the Master 1^{st} or 2^{nd} year. After evaluation of their written applications, candidates have a personal interview before admission to the AIV Master program.

Open Doors at the CRI check our website for the schedule

www.aiv-paris.org

email : contact@aiv-paris.org tel : + 33 | 44 4| 25 22



Centre for Research and Interdisciplinarity (CRI) Faculté de Médecine Université Paris Descartes 24 rue du Faubourg Saint Jacques - 75014 Paris - France

Master Interdisciplinary Approaches to Life Science

cursus Liliane Bettencourt

2012 - 2013 Master of Science



«None of us is as smart as all of us»

ParisTech







Master 1

The 1st year of the AIV Master is the first M1 in France to teach systems biology and synthetic biology. Your training will be at the interface of life sciences and physics, mathematics and computer science.

You will also discover methods of statistical analysis and mathematical modeling, as well as sophisticated technologies (fluorescence microscopy, nano-fabrication, molecular forces measurements, etc.) which are used to quantify the properties of living systems. Students can participate in external modules to acquire or strengthen a specific knowledge.

During the second M1 semester, students will "learn through research" during an internship in a laboratory of their choice in the Paris area or by participating in the iGEM Paris Liliane Bettencourt team at the synthetic biology competition organized each year by the MIT. Our team iGEM Paris-LB has been the fist French team to participate and has been singled out each year.

lst semester courses

Systems Biology Synthetic Biology Dynamics of Living Systems Computational Biology Experimental Methodology Statistics for System Biology Science & Medicine

2nd semester

Scientific Communication

5 months internship or iGEM competition iCEM During the 2nd year, you will deepen your knowledge of life sciences, develop your ability to critically analyze scientific works and discover the Research world.

The M2 starts with a workshop in which all AIV M2 students take part, along with the FdV 1st year PhD fellows. In small groups, you will learn how to create interdisciplinary research projects.

The weekly Friday afternoon courses, throughout the year are geared to develop the students' capacities to read and analyze current scientific articles. The remainder of the M2 curriculum is devoted to research, through three internships, with at least one theoretical internship and one experimental internship.

For those willing to pursue in a PhD program, the last semester will give them the opportunity to prepare a thesis project.

All M1 and M2 courses are taught in English, as many students from around the world enter the AIV Master every year.

3rd & 4th semesters

Master 2

Project writing workshop Critical analysis of research articles

Bibliography project

Scientific debate and development of thesis project

Networks and dynamics

ICT & Health

Systems Biology

Synthetic Biology

3 research internships

Des questions ?



AIV courses are held at the Center for Research and Interdisciplinarity which also hosts the Liliane Bettencourt Frontiers in Life Sciences (FdV) doctoral school. The CRI is an ideal environment for exchanges among students and associate researchers. Prospective candidates should not hesitate to contact us and are most welcome to attend a Friday seminar.



Many French and foreign researchers are participating in the activities of the CRI, through courses, seminars, workshops and conferences, providing a permanent link between students and the research world. Contributors come from the best universities and research centres (*Harvard, MIT, Weizmann, Stanford, VUmcAmsterdam, CNRS, Paris Descartes, Paris Diderot, ENS, INSERM*).



The CRI also hosts scientific discussion clubs in which AIV students take part: synthetic biology, science & development, artificial intelligence, neurobiology, networks, information and web...

The students have seminar rooms, a fully equipped computer room, a dedicated library and a lounge at their disposal.

Le CRI



How to apply for admission to the AIV program?

Applications are to be filled on our website. After admission, registration can take place either at Paris-Diderot or Paris-Descartes Universities. It is also possible to register to the Master AIV 2nd year through the Master PSB at Paris-Diderot or as part of the S2I2 BME curriculum at ParisTech.

Backgrounds of students entering the AIV Master's program?

The AIV master program is interdisciplinary: students come from many disciplines (*biology*, *physics*, *medicine*, *mathematics*, *chemistry*, *computer* science...) and from very different backgrounds (*universities*, *medical* schools, engineering schools students and graduates...). What matters to us is your motivation and your interest for science.

What do AIV students do after completing the AIV program?

More than 80% follow a PhD program either in France or elsewhere (CNRS, INSERM, INRA, INRIA, Rockefeller, Harvard...); others work for the industry.